

Replace the paragraph beginning at page 1, line 23 with:

However, in the conventional system using the SERCOS interface, the precision of the control period is determined by the precision of periodic transmission of the synchronous packet (sync-telegram), and if transfer of a large packet is attempted at the same time as asynchronous communication between slaves, jitter occurs in the transmission period of the synchronous packet (sync-telegram), and packet transfer of large size or asynchronous communication between slaves cannot be achieved. Thus, flexibility is lacking.

Replace the paragraph beginning at page 16, line 23 with:

Fig. 1 is a block diagram of outline of a periodic control synchronous system in a first embodiment of the invention;

Replace the paragraph beginning at page 17, line 4 with:

Fig. 3 is a block diagram of a periodic control synchronous system in a second embodiment of the invention;

Replace the paragraph beginning at page 17, line 7 with:

Fig. 4 is a timing chart showing timer correction when the period of the control period timer or the operation period timer shown in Fig. 3 is longer than the period of periodic control;

Replace the paragraph beginning at page 17, line 11 with:

Fig. 5 is a timing chart showing timer correction when the period of the control period timer or the operation period timer shown in Fig. 3 is shorter than the period of periodic control;

Replace the paragraph beginning at page 17, line 15 with:

Fig. 6 is a timing chart showing another timer correction when the period of the control period timer or the operation period timer shown in Fig. 3 is shorter than the period of periodic control;

Replace the paragraph beginning at page 17, line 19 with:

Fig. 7 is a timing chart showing timer period correction when the period of the control period timer or the operation period timer shown in Fig. 3 is longer than the period of periodic control;

Replace the paragraph beginning at page 17, line 23 with:

Fig. 8 is a timing chart showing timer period correction when the period of the control period timer or the operation period timer shown in Fig. 3 is shorter than the period of periodic control;

Replace the paragraph beginning at page 18, line 2 with:

Fig. 9 is a block diagram of a periodic control synchronous system in a third embodiment of the invention;

Replace the paragraph beginning at page 18, line 5 with:

Fig. 10 is a timing chart showing synchronous a process of local sync timing using a time stamp;

Replace the paragraph beginning at page 18, line 7 with:

Fig. 11 is a timing chart showing timer correction when the period of the operation period timer shown in Fig. 10 is longer than the control period;

Replace the paragraph beginning at page 18, line 10 with:

Fig. 12 is a timing chart showing timer correction when the period of the operation period timer shown in Fig. 10 is shorter than the control period;

Replace the paragraph beginning at page 18, line 13 with:

Fig. 13 is a timing chart showing another timer correction when the period of the operation period timer shown in Fig. 10 is shorter than the control period;

Replace the paragraph beginning at page 18, line 16 with:

Fig. 14 is a timing chart showing timer period correction when the period of the control period timer or the operation period timer shown in Fig. 10 is longer than the period of periodic control;

Replace the paragraph beginning at page 18, line 20 with:

Fig. 15 is a timing chart showing timer period correction when the period of the control period timer the or operation period timer shown in Fig. 10 is shorter than the period of periodic control;

Replace the paragraph beginning at page 18, line 24 with:

Fig. 16 is a block diagram of a periodic control synchronous system in a fourth embodiment of the invention;

Replace the paragraph beginning at page 19, line 2 with:

Fig. 17 is a timing chart showing a synchronous process of system sync timing using time stamp;

Replace the paragraph beginning at page 19, line 4 with:

Fig. 18 is a timing chart showing a synchronous process when the system sync timing is ahead of the local sync timing;

Replace the paragraph beginning at page 19, line 6 with:

Fig. 19 is a timing chart showing synchronous a process when the local sync timing is ahead of the system sync timing;

Replace the paragraph beginning at page 19, line 8 with:

Fig. 20 is a timing chart showing timer period correction;